APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
KING, JOHN B

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/554,229	VAUCLAIR, MARC
	Examiner	Art Unit	
	JOHN B. KING	4148	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>30 July 2008</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-11</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-11</u> is/are rejected.

7)☒ Claim(s) <u>1, 6, 7, and 8</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>25 October 2005</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☒ All   b)☐ Some * c)☐ None of:

         1.☒ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____.

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   The instant application having Application No. 10554229 filed on October 25, 2005 is presented for examination by the examiner.

Oath/Declaration

2.   The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63.**

Priority

3.   As required by **M.P.E.P. 201.14(c)**, acknowledgement is made of applicant's claim for priority based on applications filed on April 28, 2003 (EPO 03101156.2).

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

4.   **The drawings are objected to for the following reasons:**

the drawings are not clearly labeled with descriptive material;

reference numbers 121,155,160,165 and 170 are not mentioned in the

written description.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

number of an amended drawing should not be labeled as "amended." If a drawing figure

is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for

consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next

Office action. The objection to the drawings will not be held in abeyance.

Specification

5.   The following guidelines illustrate the preferred layout for the specification of a

utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

        As provided in 37 CFR 1.77(b), the specification of a utility application should

include the following sections in order. Each of the lettered items should appear in

upper case, without underlining or bold type, as a section heading. If no text follows the

section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR
    DEVELOPMENT.
(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A
    COMPACT DISC.
(f) BACKGROUND OF THE INVENTION.
    (1) Field of the Invention.
    (2) Description of Related Art including information disclosed under 37
    CFR 1.97 and 1.98.
(g) BRIEF SUMMARY OF THE INVENTION.
(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(i) DETAILED DESCRIPTION OF THE INVENTION.
(j) CLAIM OR CLAIMS (commencing on a separate sheet).
(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A
    "Sequence Listing" is required on paper if the application discloses a
    nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if
    the required "Sequence Listing" is not submitted as an electronic
    document on compact disc).

6.   The disclosure is objected to because of the following informalities: **Reference**

Numbers 202 and 306 are mentioned in the written description, but are not

disclosed in the drawings.

    Appropriate correction is required.

7.   The disclosure is objected to because it contains an **embedded hyperlink**

and/or other form of browser-executable code. **For example, page 2 line 7 and page 4**

line 6 of the disclosure contain embedded hyperlinks. Applicant is required to delete

the embedded hyperlink and/or other form of browser-executable code. See MPEP §

608.01.

Claim Objections

8.   **Claims 1, 6, 7 and 8** are objected to because of the following informalities:

As per claims 1 and 8, the body of the claim contains transitional phrases. This is

inconsistent with the suggested claim format. Transitional phrases such as comprising

and further involving should only be used to transition from the preamble to the body of

the claim. See MPEP § 2111.02.

As per claims 1, 6, 7 and 8, the body of the claim repeats the type of statutory

class that is being claimed. This is inconsistent with the suggested claim format. The

claimed type of statutory class should only be listed in the preamble of the claim. See

MPEP § 2111.02.

Claim Rejections - 35 USC § 112

9.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

10.   **Claims 1, 6 and 8** are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

As per **claim 1,** the term "content" is broad enough that it could be read on any

type of content such as analog content, digital protected content, or digital unprotected

content.

As per **claim 6**, the wording of the claim is neither an independent nor a

dependent claim, thus the claim is indefinite. While it looks like an independent claim, it

relies on claim 1 to complete one of the limitations.

As per **claim 8**, the term "content material" is broad enough that it could be read

on any type of content such as analog content, digital protected content, or digital

unprotected content.

Double Patenting

11.   The nonstatutory double patenting rejection is based on a judicially created
doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the
unjustified or improper timewise extension of the "right to exclude" granted by a patent
and to prevent possible harassment by multiple assignees.   A nonstatutory
obviousness-type double patenting rejection is appropriate where the conflicting claims
are not identical, but at least one examined application claim is not patentably distinct
from the reference claim(s) because the examined application claim is either anticipated
by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140
F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29
USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.
1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422
F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163
USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d)
may be used to overcome an actual or provisional rejection based on a nonstatutory
double patenting ground provided the conflicting application or patent either is shown to
be commonly owned with this application, or claims an invention made as a result of
activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a
terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with
37 CFR 3.73(b).

12.   **Claim 1** is provisionally rejected under the judicially created doctrine of

obviousness-type double patenting as being unpatentable over claim 1 and 8 of

copending Application No. 10/554381.

Initially, it should be noted that the present application and Application No. 10/554381, have the same inventive entity. The inventor for both applications is Marc Vauclair.

Claimed subject matter in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as noted below. *See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993).*

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See MPEP § 804.

Claim 1 is compared to claim 1 of application 10/554381 in the following table:

Instant Application	Application No. 10/554381
A method of facilitating access control to content,	A method of facilitating access control to content,
the method involving entities each being identified by a unique identifier,	the method involving entities each being identified by a unique identifier,
the method further involving revocation of at least one unique identifier,	the method further involving revocation of at least one unique identifier,
where a revoked unique identifier is further referred to as revoked identifier,	where a revoked unique identifier is further referred to as revoked identifier,
the method comprising maintaining a local revocation list of entries, each entry representing at least one revoked identifier,	the method comprising maintaining a local revocation list that contains a list of revoked identifiers,
characterized in that the entries in the	

local revocation list are generated by applying a conversion step to the at least one unique identifier generating a shorter representation uniquely identifying that at least one unique identifier.	
	receiving a new revoked identifier, and subsequently conditionally updating the local revocation list with the received new revoked identifier,
	characterized in that the method further comprises an admission step including taking a random decision before updating the local revocation list, the decision being either to ignore the received new revoked identifier, or to update the local revocation list with the received new revoked identifier.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the only difference between claim 1 of the instant application and claim 1 of pending application no. 10/554381 is that the revocation list is converted to lower storage costs. In view of Micali (US Patent No. 5793868) col. 6, lines 40-51 states that the shorter revocation list can be around three times shorter than the conventional revocation list which is a storage savings of around 2/3 of the storage space. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine with Micali to generate a local revocation list to lower storage costs.

Claim Rejections - 35 USC § 101

13.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

14.   **Claim 1** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 1 is claiming a method or process, however, the claimed process is not tied to another statutory category as required for the process to be eligible subject matter. Therefore, claim 1 is rejected as be directed to non-statutory subject matter.

        Claims 2-7 are rejected under 35 U.S.C. 101 as non-statutory for at least the reason stated above. Claims 2-7 are dependent on claim 1, however, they do not add any feature or subject matter that would solve any of the non-statutory deficiencies of claim 1.

        Claim 10 is rejected under 35 U.S.C. 101 as directed o non-statutory subject matter of software, *per se*. The claim lacks the necessary physical articles or objects to constitute a machine or manufacture within the meaning of 35 U.S.C. 101. It is clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. It is at best, function descriptive material *per se*.

        Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are non-statutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive

material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

Merely claiming non-functional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

In this case, claim 10 is directed towards a computer program, per se, i.e. the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer programs functionality to be realized.

Claim 11 is rejected under 35 U.S.C. 101 as non-statutory for at least the reason stated above. Claim 11 is dependent on claim 1, however, it does not add any feature or subject matter that would solve any of the non-statutory deficiencies of claim 1.

Claim Rejections - 35 USC § 102

15.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16.   **Claims 1, 3, 4, 6, 7 and 11** are rejected under 35 U.S.C. 102(b) as being anticipated by Micali (US Patent No. 5793868).

As per **claim 1**, Micali discloses A method of facilitating access control to content, the method involving entities [certificates] being identified by a unique identifier [serial number] (col. 10, lines 14-20), the method further involving revocation of at least one unique identifier [serial numbers] (col. 6, lines 35-37, Micali teaches that the revocation list (MCRL) contains a list of the revoked serial numbers).

where a revoked unique identifier [serial number] is further referred to as revoked identifier [revoked certificate] (col. 6 lines 35-37),

the method comprising maintaining a local revocation list [MCRL (Minimal Certificate Revocation List)] of entries, each entry representing at least one revoked identifier [serial number] (col. 5, lines 60-65, Micali teaches that a new MCRL is periodically sent to users. In order for the new list to be distributed, it must first be maintained and updated)characterized in that the entries in the local revocation list [MCRL] are generated by applying a conversion step [compressing] to the at least one unique identifier generating a shorter representation uniquely identifying that at least one unique identifier (col. 6, lines 10-16 and 35-37, Micali teaches that a MCRL is generated by compressing the serial numbers of the revoked certificates, and col. 6, lines 40-48, the compressed version is shorter than the uncompressed version).

As per **claim 3**, Micali discloses the method according to claim 1 [see rejection to claim 1 above], the method further comprising a verification step in which a unique identifier is verified by applying the conversion step to the unique identifier, comparing the shorter representation of the unique identifier with the entries in the local revocation list, and the unique identifier is considered to be revoked when the comparison finds a match between the shorter representation of the unique identifier and an entry in the local revocation list (col. 6, lines 24-40, Micali teaches that a certificate has been revoked when the serial number of that certificate is located on the revocation list). It is inherent that the compression and comparison must be performed in order to determine if the serial number is located on the revocation list.

As per **claim 4**, Micali discloses the method according to claim 1 [see rejection to claim 1 above], wherein the conversion step [data compression techniques] comprises the computation of a hash of the at least one unique identifier, the hash becoming the shorter representation (col. 6, lines 11-16, Micali teaches that the serial numbers that are stored in the revocation list may be a compressed (converted) version of the serial numbers. Micali also discloses that the revocation list of the compressed serial numbers is "three times shorter" than a basic uncompressed revocation list as in col. 6, line 45. Micali also teaches that many other data compression techniques can be used to shorten the revocation list, such as a hash function as in col. 7, lines 47-50 and col. 8, lines 1-5 and col. 10, lines 14-20).

As per **claim 6,** Micali discloses a generator method of issuing unique identifiers, comprising the step of generating a new unique identifier [data] (col. 3, lines 14-20,

Micali teaches generating data about a revoked certificate that can identify that particular revoked certificate. Therefore, the generated data must be able to uniquely identify that revoked certificate. The generated data can be any kind of data which can include serial numbers or identifiers).

characterized in that the generator method performs the conversion step of claim 1 on the new unique identifier, resulting in a shorter representation [see rejection to claim 1 above],

the generator method rejecting the issuing of the new unique identifier [serial number] if the shorter representation of the new unique identifier matches the shorter representation of any of the previously issued generated unique identifiers (col. 6, lines 24-40, Micali teaches that a certificate has been revoked when the serial number of that certificate is located on the revocation list. The revocation list contains a list of all of the previously generated unique serial numbers/identifiers). It is inherent that the comparison must be performed in order to determine if the serial number is located on the revocation list.

As per **claim 7,** Micali discloses the generator method according to claim 6 [see rejection to claim 6 above],

wherein the generator method maintains a history list [MCRL] of the shorter representation of the new unique identifier [serial number] (col. 6,lines 5-40, Micali teaches using and compressing the revocation list. In order to perform these operations on the revocation list, the list must be stored somewhere, and the storage of the revocation list can be considered as a type of maintaining the list. Micali teaches

compressing the revocation list which is a form of generating a shorter representation of

the revocation list),

and wherein the generator method rejects [revokes] the new unique identifier if the

shorter representation of the newly generated unique identifier matches an entry in the

history list (col. 6, lines 24-40, Micali inherently teaches that a serial number/identifier is

rejected if it matches an item that is already present in the revocation list [see rejection

to claim 1 above]).

   Claim 11 discloses a computer program product for performing the method of

claim 1. Therefore, it is rejected under Micali for the same reasons [see rejection to

claim 1 above].

Claim Rejections - 35 USC § 103

17.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

18.   **Claims 2, 5, 8, 9, and 10** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Micali in view of Pasieka (US Patent No. 7260715).

   As per **claim 2**, Micali discloses the method according to claim 1 [see rejection to

claim 1 above], the method further comprising receiving a new revoked identifier (col. 5,

lines 60-65),performing the conversion step (col. 6, lines 10-16). Micali is silent in teaching the method of updating the revocation list.

However, Pasieka discloses subsequently updating the local revocation list with the generated shorter representation of the received new revoked identifier (col. 2, lines 48-57 and col. 4, lines 47-55, Pasieka discloses a method of using a contact list in conjunction with the revocation list to store a list of entities that try to gain access to the system and also if that particular entity has been revoked. Pasieka also teaches a method of updating both the contact list and the revocation list when a new entity tries to gain access).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Micali with the method of updating the revocation list of Pasieka because it would provide for the purpose of allowing for the updating of the contact/revocation list.

As per **claim 5,** Micali discloses the method according to claim 1 [see rejection to claim 1 above]. Micali teaches storing the revocation list but is silent in teaching securely storing the revocation list.

However, Pasieka discloses the method further comprises secure storing of the local revocation list (col. 7, lines 1-3, Pasieka teaches the method of using a contact list in conjunction with the revocation list to store a list of entities that try to gain access to the system and also if that particular entity has been revoked. Pasieka also teaches securing the contact list by generating a digital signature).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Micali with the method of securely storing the revocation list of Pasieka because it would provide for the purpose of securely storing the contact/revocation list by generating a digital signature which is updated each time the contact/revocation list is modified.

As per **claim 8**, Micali discloses a system for controlling access to content material, the system comprising entities [certificates] being identified by unique identifiers [serial number] (col. 10, lines 14-20), the system further being arranged to handle revocation of at least one unique identifier [serial numbers] (col. 6, lines 35-37, Micali teaches that the revocation list (MCRL) contains a list of the revoked serial numbers), the system comprising a local revocation list [MCRL (Minimal Certificate Revocation List)] of entries, each entry representing at least one revoked identifier [serial number] (col. 5, lines 60-65, Micali teaches that a new MCRL is periodically sent to users. In order for the new list to be distributed, it must first be maintained and updated). Micali also teaches the generating of the revocation list by applying a conversion step [compression] to the unique identifiers (col. 6, lines 10-16 and 35-37).

However, Micali is silent in teaching the receiving of a new revoked identifier and updating the revocation list with the new revoked identifier.

Pasieka discloses the receiving of a new revoked identifier, and the updating of the local revocation list (col. 2, lines 48-57 and col. 4, lines 47-50, Pasieka teaches the method of receiving a newly revoked identifier and then updating the revocation list to contain the newly revoked identifier).

Micali and Pasieka are analogous art because they are in the same field of endeavor of accessing control systems by using a revocation list.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Micali with Pasieka's teachings of receiving a new revoked identifier and updating the revocation list with the new revoked identifier to improve the accuracy and security of the system in order to avoid communication with a non-trusted device that could jeopardize the security of the system, and to also convert the revocation list as to lower the cost of storing the revocation list.

As per **claim 9,** Micali discloses the system according to claim 8 [see rejection to claim 8 above] wherein the use of a shorter representation of a unique identifier (col. 10, lines 14-20 and col. 6, lines 24-40, Micali teaches the shorter representation of the serial numbers, which is used for limiting access to a resource as in col. 3, lines 35-37) but does not specifically disclose the matching of an access device with an entry in the local revocation list.

However, Pasieka discloses the system comprising an access device for controlling access [access control system] to content material, the access device being identified by a unique identifier [access identifier] (col. 3, lines 40-42 and col. 4, lines 1-7, Pasieka teaches an access control system with an access identifier). Pasieka also discloses controlling access to the device depending on if a match is found between the unique identifier of the access device and an entry in the local revocation list (col. 4, lines 1-7).

Micali and Pasieka are analogous art because they are in the same field of endeavor of accessing control systems by using a revocation list.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Micali with Pasieka's teachings of limiting the access if a match for the access control device is found on the revocation list. Note that Micali also teaches the use of a shorter representation for an identifier. Therefore, it would have been obvious to use a shorter representation of the unique identifier of the access device to lower the storage costs of storing the revocation list.

As per **claim 10,** Micali discloses a device arranged to store a local revocation list of entries (col.6, lines 35-37),

each entry representing at least one revoked identifier (col. 5, lines 60-65). Micali also teaches the generating of the revocation list by applying a conversion step [compression] to the unique identifiers (col. 6, lines 10-16 and 35-37).

However, Micali is silent in teaching the receiving of a new revoked identifier and updating the revocation list with the new revoked identifier.

Pasieka discloses the receiving of a new revoked identifier, and the adding of an entry containing the new revoked identifier to the local revocation list (col. 2, lines 48-57 and col. 4, lines 47-50).Pasieka teaches the method of receiving a newly revoked identifier and then updating the revocation list to contain the newly revoked identifier.

Micali and Pasieka are analogous art because they are in the same field of endeavor of accessing control systems by using a revocation list.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Micali with Pasieka's teachings of receiving a new revoked identifier and updating the revocation list with the new revoked identifier. Note that Micali also teaches the use of a compressing technique in generating the revocation list. Therefore, it would have been obvious to allow for the updating of the revocation list with a newly revoked identifier, and to also convert the revocation list as to lower the cost of storing the revocation list.

Conclusion

19.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

20.   The following reference teaches the updating of a revocation list.

US Pat. No. 5699431

21.   The following reference teaches the revocation and updating of a certificate.

Noir, Moni, and Kobbi Nissim. "Certificate Revocation and Certificate Update." IEEE Journal on Selected Areas in Communications 18 (2000): 561-70.

22.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN B. KING whose telephone number is (571)270-7310. The examiner can normally be reached on Mon. - Thur. 7:30 AM - 5:00 PM est..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Pham can be reached on (571)272-3689. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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